

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

Sacramento Maintenance Yard Sacramento Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	04/30/2019 04/30/2019	Zach Jojola

LM Start		Rating **	A	Issue No.	3
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Operations & Maintenance Manuals			°	°
				°	°
DWR ID	DWR_ST0008_01_s_2013_3				
Comment Code					
Inspector Comment					
The Sacramento Maintenance Yard has the O&M manuals.					

No Photos

LM Start		Rating **	A	Issue No.	4
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Emergency Supplies & Equipment			°	°
				°	°
DWR ID	DWR_ST0008_01_f_2017_4				
Comment Code					
Inspector Comment					
The Sacramento Maintenance Yard maintains a stockpile of flood response material.					

No Photos

LM Start		Rating **	A	Issue No.	5
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Flood Preparedness & Training			°	°
				°	°
DWR ID	DWR_ST0008_01_s_2013_5				
Comment Code					
Inspector Comment					
The Sacramento Yard has a written response plan and regular flood fight training.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	04/30/2019 04/30/2019	Zach Jojola

LM Start	0.50	Rating **	M	Issue No.	10
LM End	0.50	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.604574 °	38.604574 °
				-121.568480 °	-121.568480 °
DWR ID	DWR_ST0008_01_s_2019_10				
Comment Code					
DE : Debris					
Inspector Comment					
Appliances were dumped on the landside shoulder.					

No Photos

LM Start	0.60	Rating **	A/W	Issue No.	8
LM End	0.60	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.603983 °	38.603983 °
				-121.570268 °	-121.570268 °
DWR ID	DWR_ST0008_01_f_2018_8				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Sac Yard fixed the collapsed beaver den on the waterside slope. This area should be monitored for future activity.					

Photo 1 of 1 : SP_2019_ST0008_284_8_20190304_00002.jpg



View of beaver den on the waterside toe road. Fall 2018.

LM Start	0.73	Rating **	M	Issue No.	11
LM End	0.73	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.603458 °	38.603458 °
				-121.572490 °	-121.572490 °
DWR ID	DWR_ST0008_01_s_2019_11				
Comment Code					
DE : Debris					
Inspector Comment					
Furniture was dumped on the waterside shoulder.					

No Photos

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	04/30/2019 04/30/2019	Zach Jojola

LM Start	0.75	Rating **	A/W	Issue No.	12
LM End	0.75	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			38.603337 °	38.603337 °
				-121.572912 °	-121.572912 °
DWR ID	DWR_ST0008_01_s_2019_12				
Comment Code					
C2 : Repair depressions or ruts in the crown or slope.					
Inspector Comment					
There is visible settlement on the crown on County Road 126. Recommend monitoring for further movement.					

Photo 1 of 1 : SP_2019_ST0008_284_12_20190430_00014.jpg



View of settlement on crown. Spring 2019.

LM Start	0.87	Rating **	A/W	Issue No.	9
LM End	0.87	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.602871 °	38.602871 °
				-121.574960 °	-121.574960 °
DWR ID	DWR_ST0008_01_f_2018_9				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
There possibly is a beaver den on the edge of the waterside berm. It is not within the levee prism. Recommend monitoring for activity.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	04/30/2019 04/30/2019	Zach Jojola

LM Start	1.09	Rating **	A/W	Issue No.	18
LM End	1.09	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			38.602169 °	38.602169 °
				-121.579000 °	-121.579000 °
DWR ID	19076				
Comment Code					
Inspector Comment					
FS_ID:44787 DS_ID:19076 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: A concrete saddle found on slough/drainage. No pump was found on LS and no structure/pipe found on WS. FIELD_STRUCT_DESC: *ABANDONED* 36-inch corrugated metal drainage pipe through the levee, at an unknown depth. Grouted in place. Remains of concrete structure found on the landside (LS). [Additional Reference(s): USACE Sacramento O&M Manual 122.1, August 1955, (RM 174)]. FS Date: 4/28/2015 2:44:05 PM					

LM Start	1.09	Rating **	A/W	Issue No.	18 (cont)
LM End	1.09	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_SP_2019_44787_20605.jpg



Landside view: overview

Photo 2 of 3 : UCIP_SP_2019_44787_20604.jpg



Landside view: remaining of concrete structure

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Sacramento Maintenance Yard Sacramento Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	04/30/2019 04/30/2019	Zach Jojola

LM Start	1.09	Rating **	A/W	Issue No.	18 (cont)
LM End	1.09	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			38.602169 °	38.602169 °
				-121.579000 °	-121.579000 °
DWR ID	19076				
Comment Code					
Inspector Comment					
FS_ID:44787 DS_ID:19076 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: A concrete saddle found on slough/drainage. No pump was found on LS and no structure/pipe found on WS. FIELD_STRUCT_DESC: *ABANDONED* 36-inch corrugated metal drainage pipe through the levee, at an unknown depth. Grouted in place. Remains of concrete structure found on the landside (LS). [Additional Reference(s): USACE Sacramento O&M Manual 122.1, August 1955, (RM 174)]. FS Date: 4/28/2015 2:44:05 PM					

Photo 3 of 3 : UCIP_SP_2019_44787_20606.jpg



Landside view: remaining of concrete structure on drainage/slough

LM Start	1.14	Rating **	M	Issue No.	13
LM End	1.14	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.601930 °	38.601930 °
				-121.579807 °	-121.579807 °
DWR ID	DWR_ST0008_01_s_2019_13				
Comment Code					
DE : Debris					
Inspector Comment					
Appliances are blocking access to gate.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	04/30/2019 04/30/2019	Zach Jojoia

LM Start	1.15	Rating **	M	Issue No.	17
LM End	1.72	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.601887 °	38.599457 °
				-121.580057 °	-121.589895 °
DWR ID	DWR_ST0008_01_s _ 2019_17				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

LM Start	1.15	Rating **	M	Issue No.	16
LM End	1.72	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.601887 °	38.599462 °
				-121.580057 °	-121.589894 °
DWR ID	DWR_ST0008_01_s _ 2019_16				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	04/30/2019 04/30/2019	Zach Jojola

LM Start	1.43	Rating **	A/W	Issue No.	7
LM End	1.59	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 USACE Erosion Survey, DRAFT			38.600456 °	38.599713 °
				-121.584883 °	-121.587668 °
DWR ID	DWR_ST0008_01_f_2018_7				
Comment Code					
Inspector Comment					
2017 Site ID: SAP 1.4 R Status: Critical 2017 Field Notes: New site, immediately upgraded to critical. Start of slump failure, deep cracks along levee crest, concern that a large slump failure will occur from the next heavy rain. Site History: DWR Inspector Comment: Did not observe significant damage on the waterside slope. Minor craking on the crown. Recommend monitoring.					

Photo 1 of 1 : SP_2019_ST0008_284_7_20190304_00001.jpg



View of the cracking on the crown. Fall 2018.

LM Start	1.74	Rating **	A/W	Issue No.	15
LM End	1.74	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.599546 °	38.599546 °
				-121.590235 °	-121.590235 °
DWR ID	DWR_ST0008_01_s_2018_15				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
There is runoff erosion on the oversized levee section located on the waterside levee slope. Recommend monitoring.					

Photo 1 of 1 : SP_2019_ST0008_284_15_20190304_00004.jpg



View of erosion on waterside slope. Spring 2017.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Sacramento Maintenance Yard Sacramento Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento Bypass or South Levee	Left	1.79	04/30/2019 04/30/2019	Zach Jojola

LM Start	0.03	Rating **	C	Issue No.	2
LM End	0.03	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Animal Control		38.602613 °	38.602613 °	
			-121.556021 °	-121.556021 °	
DWR ID	DWR_ST0008_02_s _ 2016_2				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

No Photos

LM Start	0.03	Rating **	M	Issue No.	3
LM End	1.73	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Vegetation		38.602613 °	38.595012 °	
			-121.556108 °	-121.585960 °	
DWR ID	DWR_ST0008_02_s _ 2019_3				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

LM Start	0.54	Rating **	M	Issue No.	4
LM End	1.13	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Vegetation		38.600212 °	38.597789 °	
			-121.564916 °	-121.575384 °	
DWR ID	DWR_ST0008_02_s _ 2019_4				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Sacramento Maintenance Yard Sacramento Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento Bypass or South Levee	Left	1.79	04/30/2019 04/30/2019	Zach Jojola

LM Start	1.26	Rating **	A/W	Issue No.	1
LM End	1.79	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			38.597023 °	38.594527 °
				-121.577558 °	-121.586638 °
DWR ID	DWR_ST0008_02_f_2017_1				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:					
Site ID No:260					
Site Designation:LMA-55					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:6/5/2017					
Notes: Minor wavewash on landside levee slope; no active erosion; no cross section taken, photo only. The erosion is not within the prism. Sac Yard will fix after vegetation gets burned. Fall 2018.					

LM Start	1.26	Rating **	A/W	Issue No.	1 (cont)
LM End	1.79	Issue Type +	Ma	Location *	

Photo 1 of 4 : SP_2019_ST0008_285_1_20190304_00001.jpg



View of the worst section of erosion, just past the gate near the end of the unit. Fall 2018.

Photo 2 of 4 : LEVAL_SP_2019_260_471.jpg



Photo from storm site evaluations.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

Sacramento Maintenance Yard Sacramento Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento Bypass or South Levee	Left	1.79	04/30/2019 04/30/2019	Zach Jojola

LM Start	1.26	Rating **	A/W	Issue No.	1 (cont)	
LM End	1.79	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	2017 Storm Damage			38.597023 °	38.594527 °	
				-121.577558 °	-121.586638 °	
DWR ID	DWR_ST0008_02_f_2017_1					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:						
Site ID No:260						
Site Designation:LMA-55						
Repair Type: Erosion						
Rating:Area of Concern						
Field Date:6/5/2017						
Notes: Minor wavewash on landside levee slope; no active erosion; no cross section taken, photo only. The erosion is not within the prism. Sac Yard will fix after vegetation gets burned. Fall 2018.						

LM Start	1.26	Rating **	A/W	Issue No.	1 (cont)
LM End	1.79	Issue Type +	Ma	Location *	

Photo 3 of 4 : LEVAL_SP_2019_260_473.jpg



Photo from storm site evaluations.

Photo 4 of 4 : LEVAL_SP_2019_260_475.jpg



Photo from storm site evaluations.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento Bypass or South Levee	Left	1.79	04/30/2019 04/30/2019	Zach Jojola

LM Start	1.28	Rating **	M	Issue No.	6
LM End	1.73	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.597156 °	38.595012 °
				-121.578013 °	-121.585961 °
DWR ID	DWR_ST0008_02_s_2019_6				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

LM Start	1.77	Rating **	M	Issue No.	7
LM End	1.77	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.594752 °	38.594752 °
				-121.586558 °	-121.586558 °
DWR ID	DWR_ST0008_02_s_2019_7				
Comment Code					
MA : Material					
Inspector Comment					
It appears that dirt was placed on the crown to block vehicle access at the end of the unit.					

Photo 1 of 1 : SP_2019_ST0008_285_7_20190430_00010.jpg



View of material on the crown. Spring 2019.

LM Start	1.77	Rating **	A/W	Issue No.	5
LM End	1.77	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.594743 °	38.594743 °
				-121.586556 °	-121.586556 °
DWR ID	DWR_ST0008_02_s_2016_5				
Comment Code					
PR : Prunings					
Inspector Comment					
This is a seasonal pile but gets burned by the LMA each year.					

No Photos

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento Bypass or South Levee	Left	1.79	04/30/2019 04/30/2019	Zach Jojola

LM Start	1.77	Rating **	A/W	Issue No.	8
LM End	1.77	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.594710 °	38.594710 °
				-121.586582 °	-121.586582 °
DWR ID	DWR_ST0008_02_s_2019_8				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
This is a runoff location, but it is not within the levee prism. Recommend monitoring.					

Photo 1 of 1 : SP_2019_ST0008_285_8_20190304_00009.jpg



View of erosion on waterside levee slope. Spring 2017.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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